

# 1.4

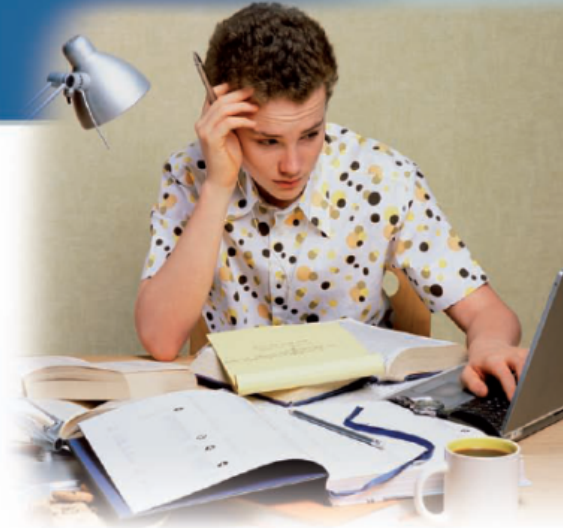
## Surface Areas of Other Composite Objects

### FOCUS

- Determine the surface areas of composite objects made from right prisms and right cylinders.



A student designed this stand for a table lamp. How could the student determine the surface area of this stand? What would he need to know?

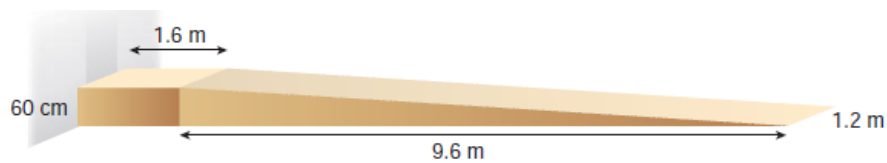


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### Investigate

2

To meet safety regulations, a wheelchair ramp must be followed by a landing. This wheelchair ramp and landing lead into an office building. Calculate the surface area of the ramp and landing.

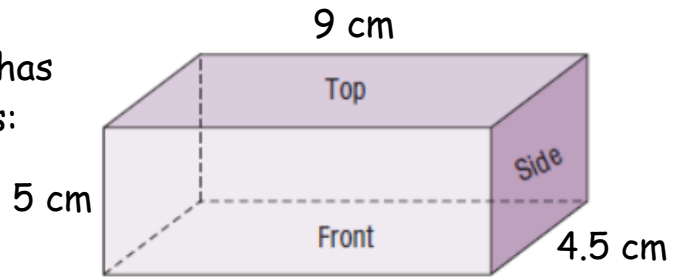


**SOLUTION:**

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### Connect

A right rectangular prism has  
3 pairs of congruent faces:



Top and Bottom

Front and Back

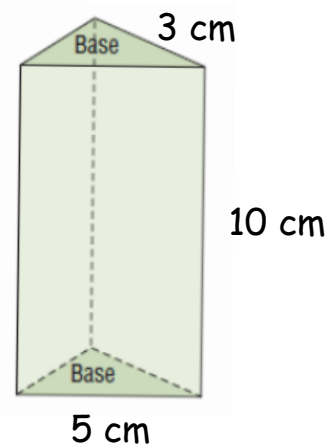
side and side

Total Surface Area =

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### Connect

A right triangular prism has 5 faces:  
2 congruent Triangular bases  
3 rectangular faces



Area of Base

Area of Triangles

Total Surface Area =

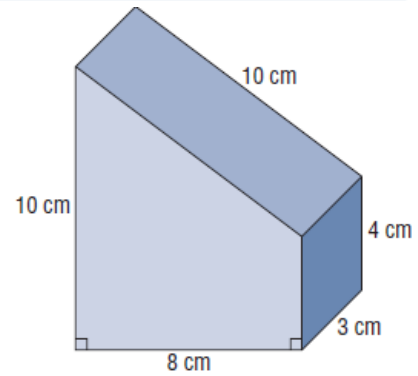
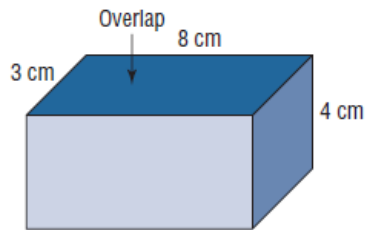
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**Example 1****Determining the Surface Area of a Composite Object Made from Two Prisms**

Calculate the surface area for this composite object.

**SOLUTION:**

Find the surface area of the Rectangular Prism



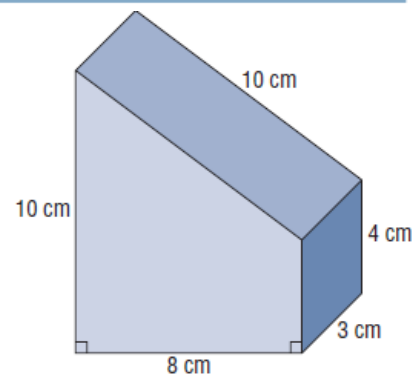
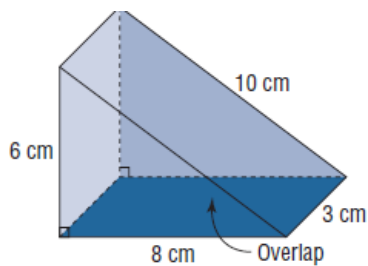
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**Example 1****Determining the Surface Area of a Composite Object Made from Two Prisms**

Calculate the surface area for this composite object.

**SOLUTION:**

Find the surface area of the Triangular Prism



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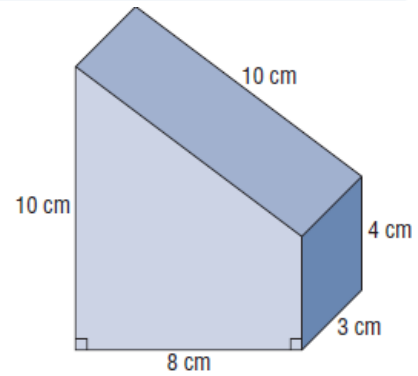
**Example 1****Determining the Surface Area of a Composite Object Made from Two Prisms**

Calculate the surface area for this composite object.

**SOLUTION:**

Total Surface Area =

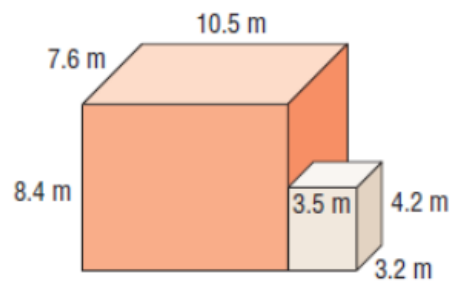
Rectangular Prism + Triangular Prism - overlap



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**YOU TRY!**

Calculate the total surface area of the two rectangular prisms.

**SOLUTION:**

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## Practice

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